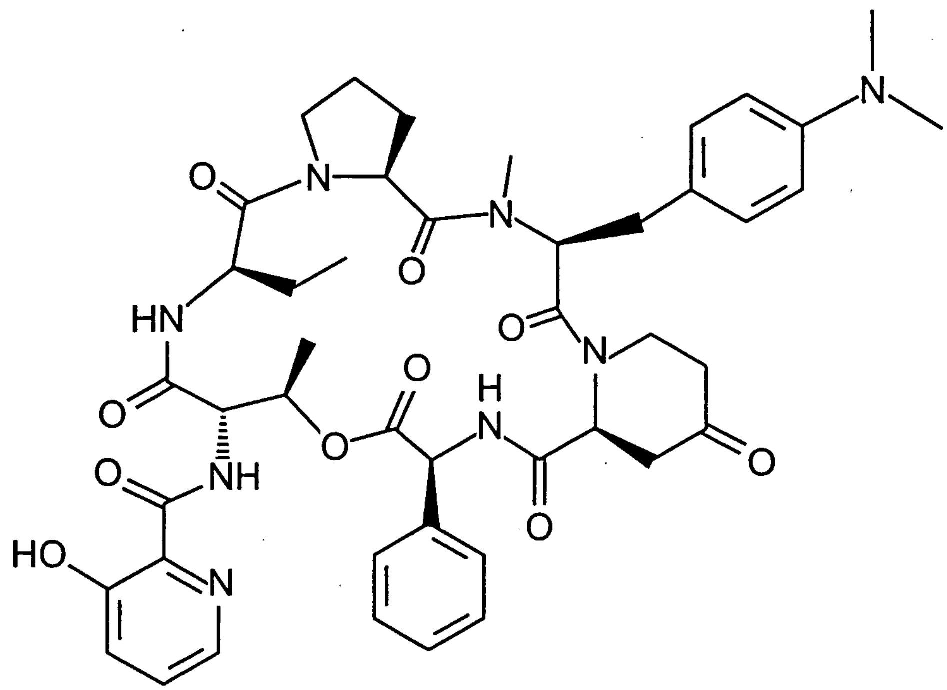
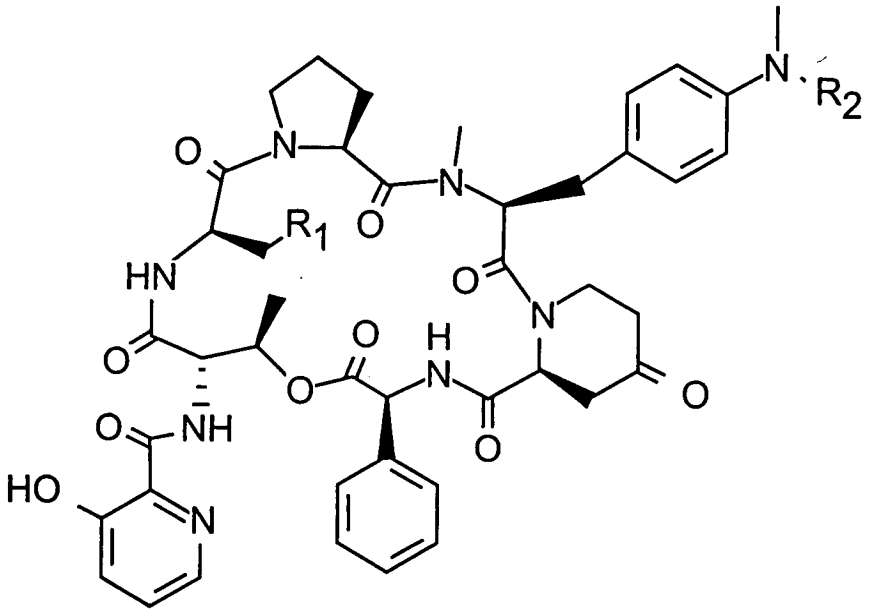
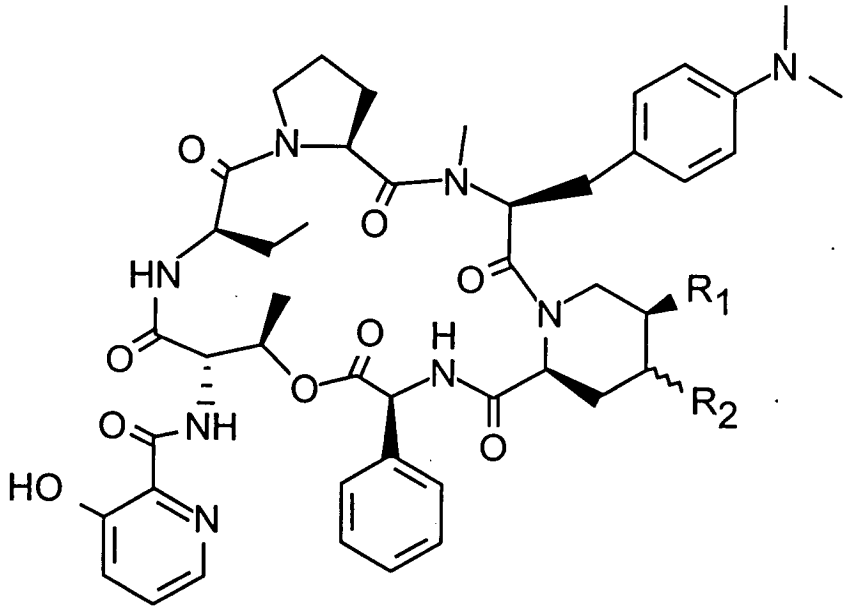


FIG. 1

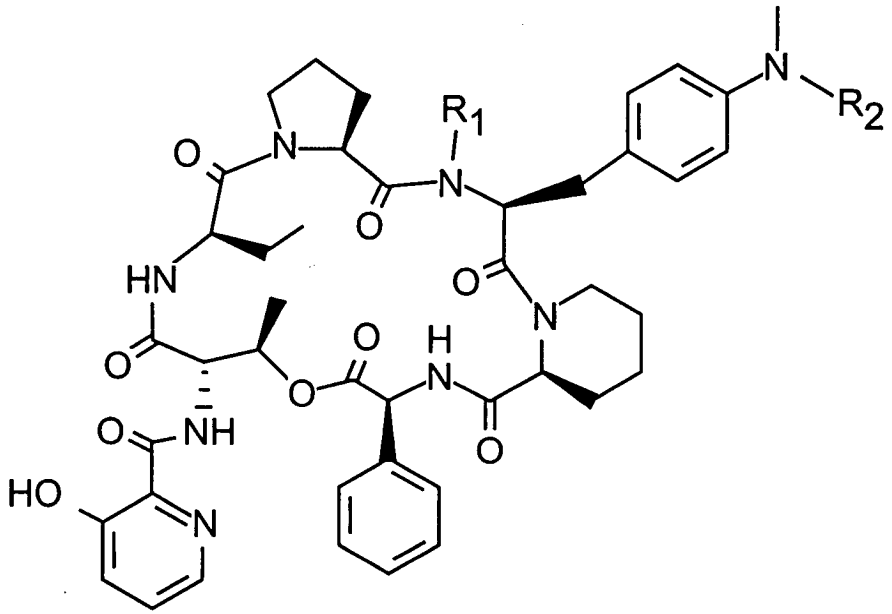


R_1=Me, R_2=H	PI_B
R_1=H, R_2=Me	PI_C
R_1=H, R_2=H	VERNAMYCIN Bδ



R_1=OH, R_2=	=O	PI_D
R_1=H, R_2=H		PI_E
R_1=H, R_2=	◀ OH	PI_F
R_1=H, R_2=	····· OH	PI_G

FIG. 2



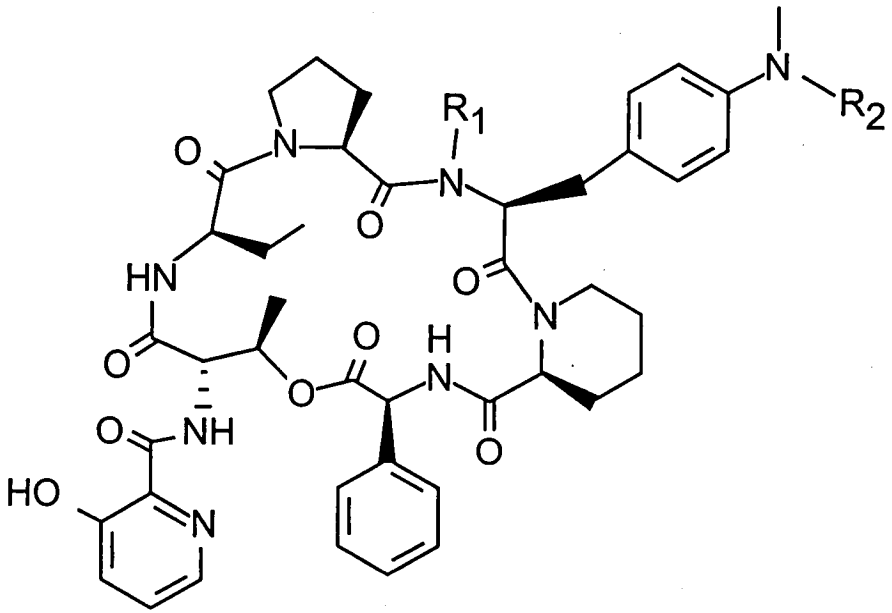
R_1=H, R_2=Me PI_H

R_1=H, R_2=H PI_I

PI_B = PRISTINAMYCIN I_B, VERNAMYCIN Bβ, OSTREOGRYCIN B_2

PI_C = PRISTINAMYCIN I_C, VERNAMYCIN Bγ, OSTREOGRYCIN B_1

FIG. 2 CONT.



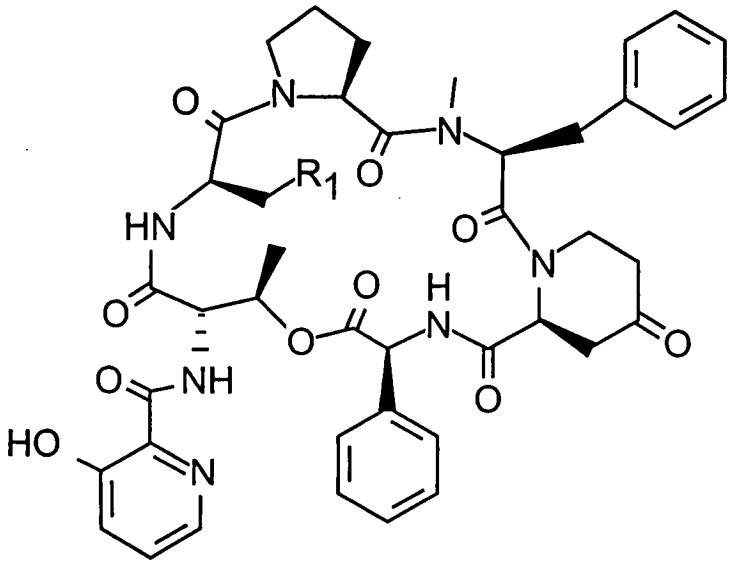
R_1=H, R_2=Me PI_H

R_1=H, R_2=H PI_I

PI_B = PRISTINAMYCIN I_B, VERNAMYCIN Bβ, OSTREOGRYCIN B_2

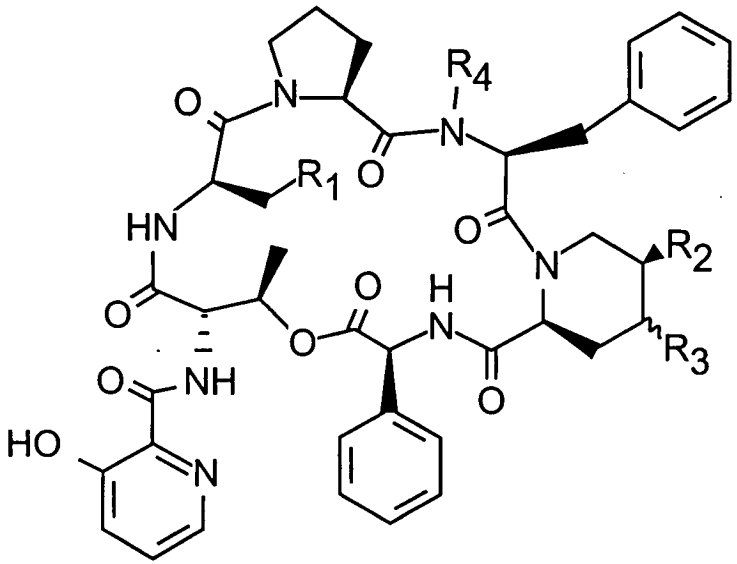
PI_C = PRISTINAMYCIN I_C, VERNAMYCIN Bγ, OSTREOGRYCIN B_1

FIG. 2 CONT.



R_1=Me, VIRGINIAMYCIN S_1

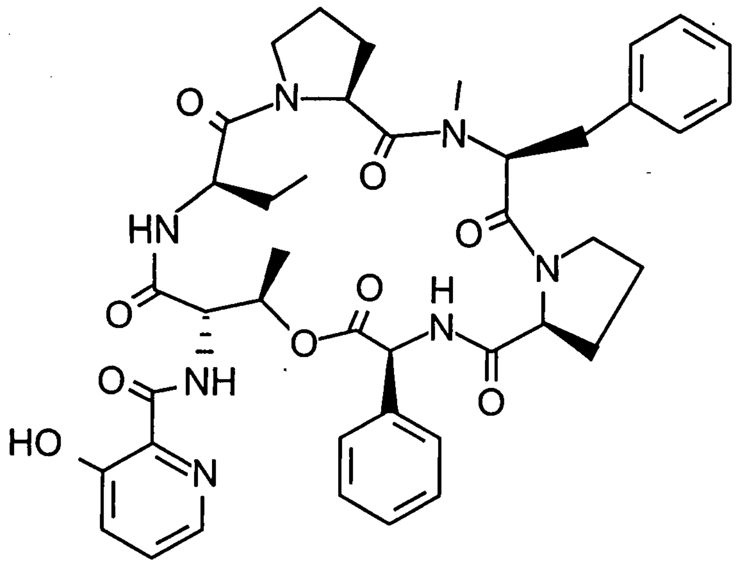
R_1=H, VS_4



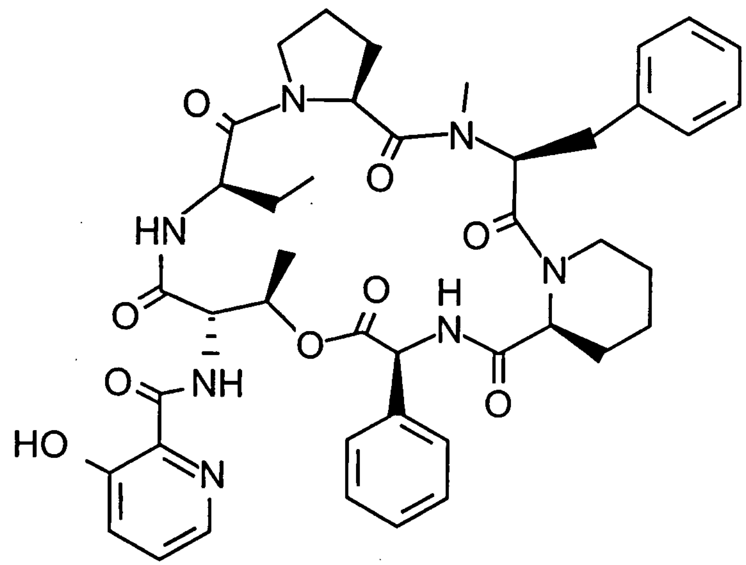
R_1=Me, R_2=H R_3= OH R_4=H VS_2

R_1=Me, R_2=OH R_3= O R_4=Me VS_3

FIG. 3

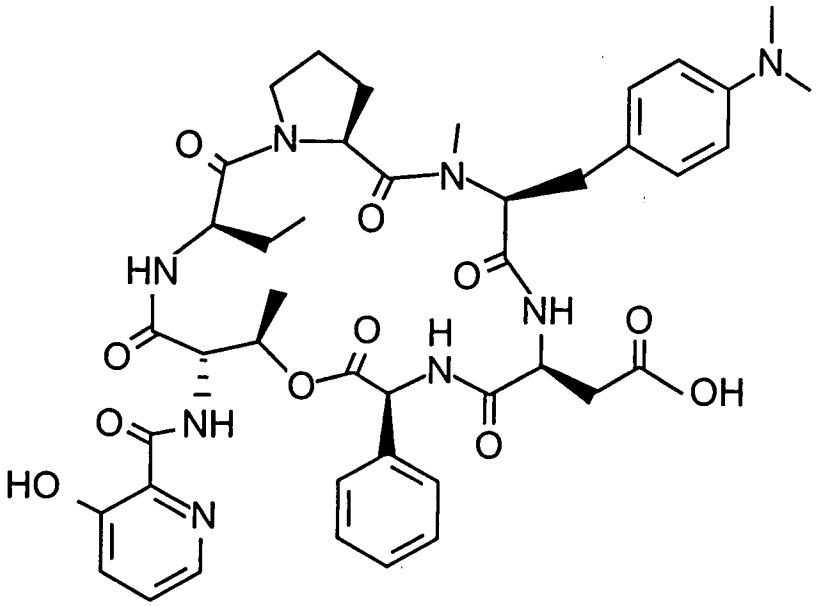


PATRICIN A

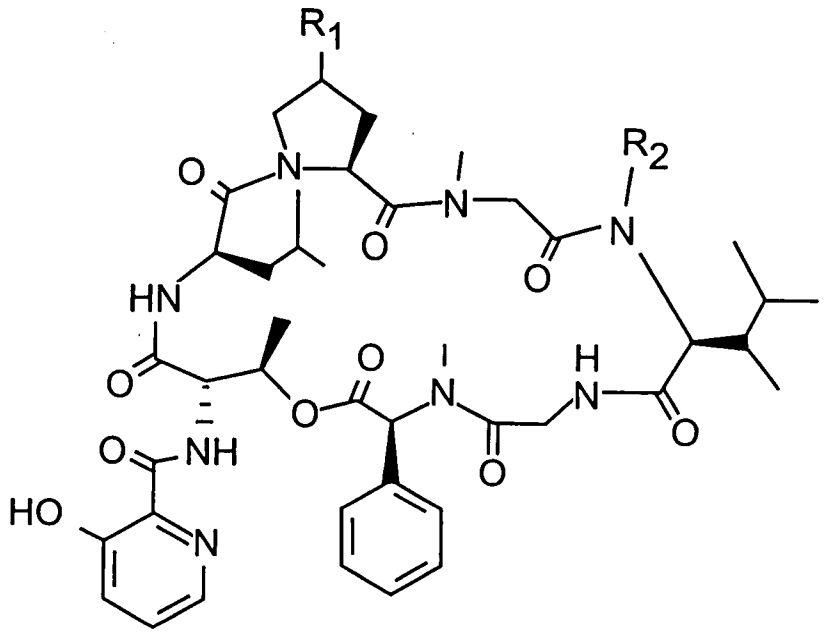


PATRICIN B

FIG. 3 CONT.



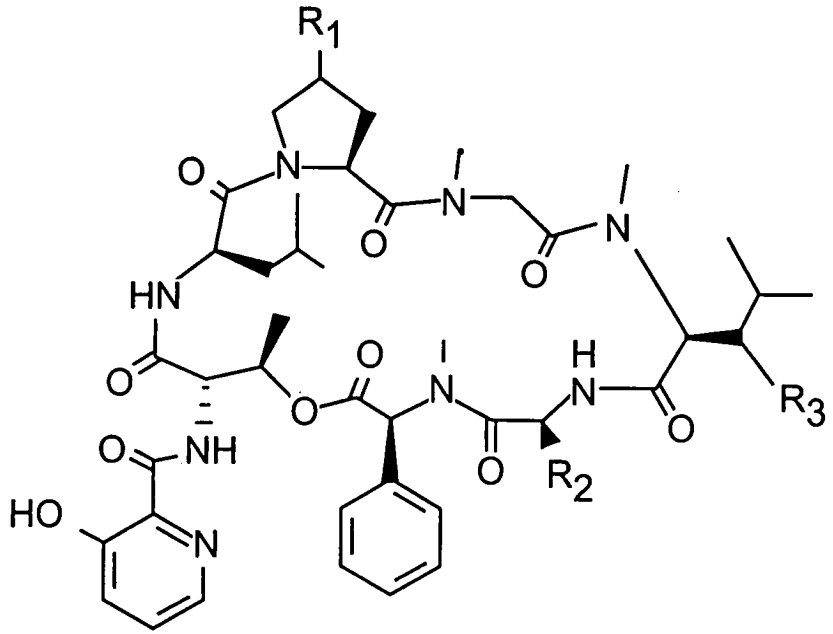
VERNAMYCIN C, DORICIN



GRIVIDOMYCIN I, II R_1=OH (cis/trans), R_2=Me

GRIVIDOMYCIN III R_1=OH, R_2=H

FIG. 3 CONT-2



ETAMYCIN A (neoviridogrisein IV, viridogrisein)

R_1=OH(cis), R_2=Me

NEOVIRIDOGRISEIN I, R_1=H, R_2=Et, R_3=Me

II, R_1=H, R_2=Me, R_3=Me

III, R_1=OH, R_2=Et, R_3=Me

Cl-c, R_1=Cl (cis), R_2=Me, R_3=Me

Cl-t, R_1=Cl (trans), R_2=Me, R_3=Me

VIRIDOGRISEIN II, R_1=OH, R_2=Et, R_3=H

FIG. 3 CONT-3

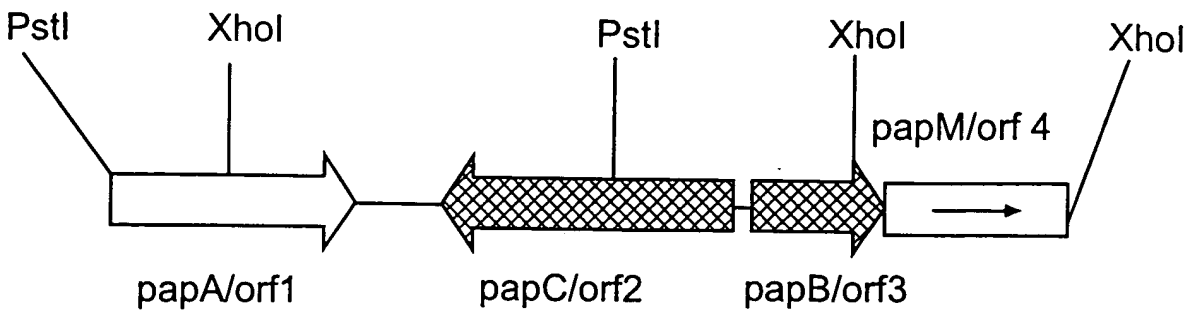


FIG. 4

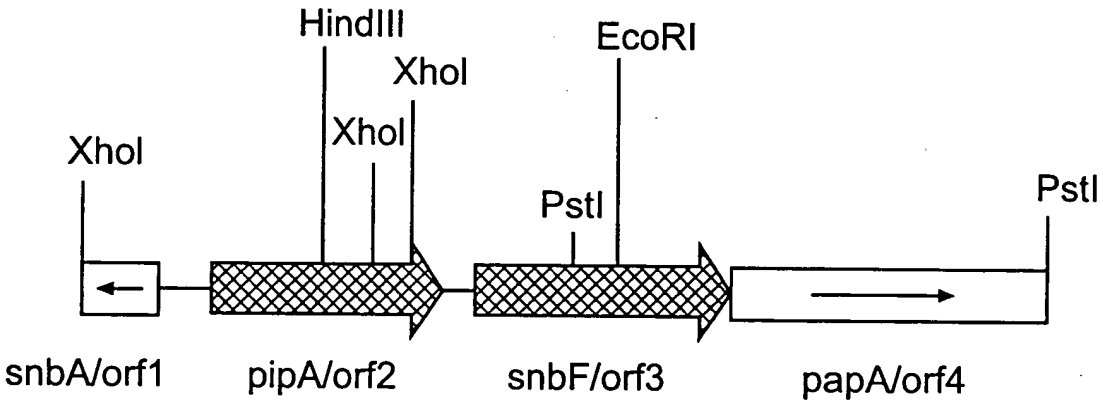


FIG. 5

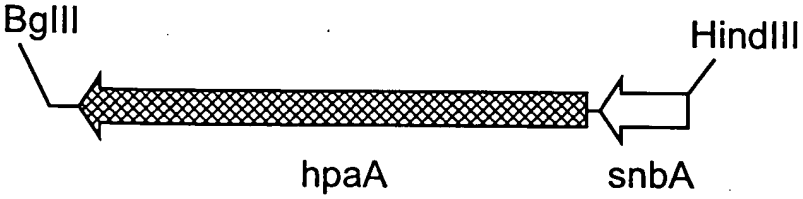


FIG. 6

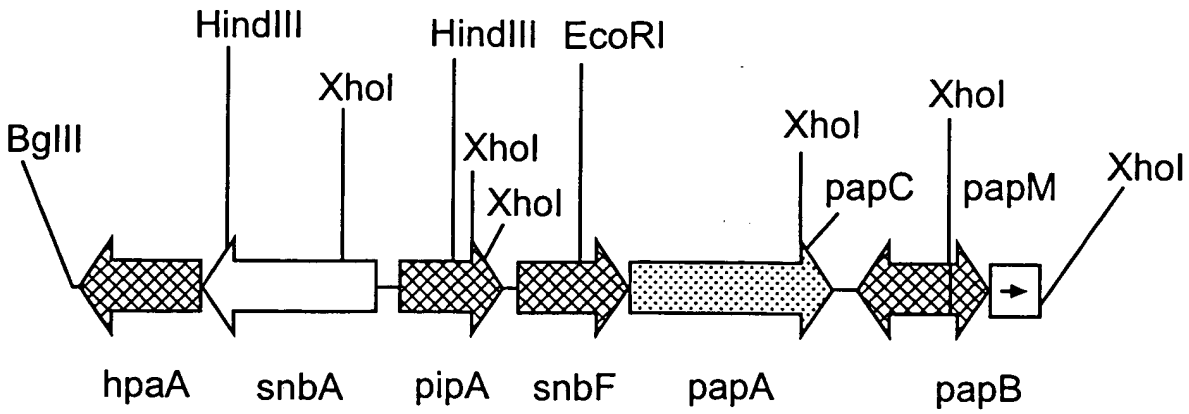

HindIII
HindIII
EcoRI
XhoI
XhoI
XhoI
XhoI
XhoI
XhoI
BglII
papC
papM
hpaA
snbA
pipA
snbF
papA
papB

FIG. 7

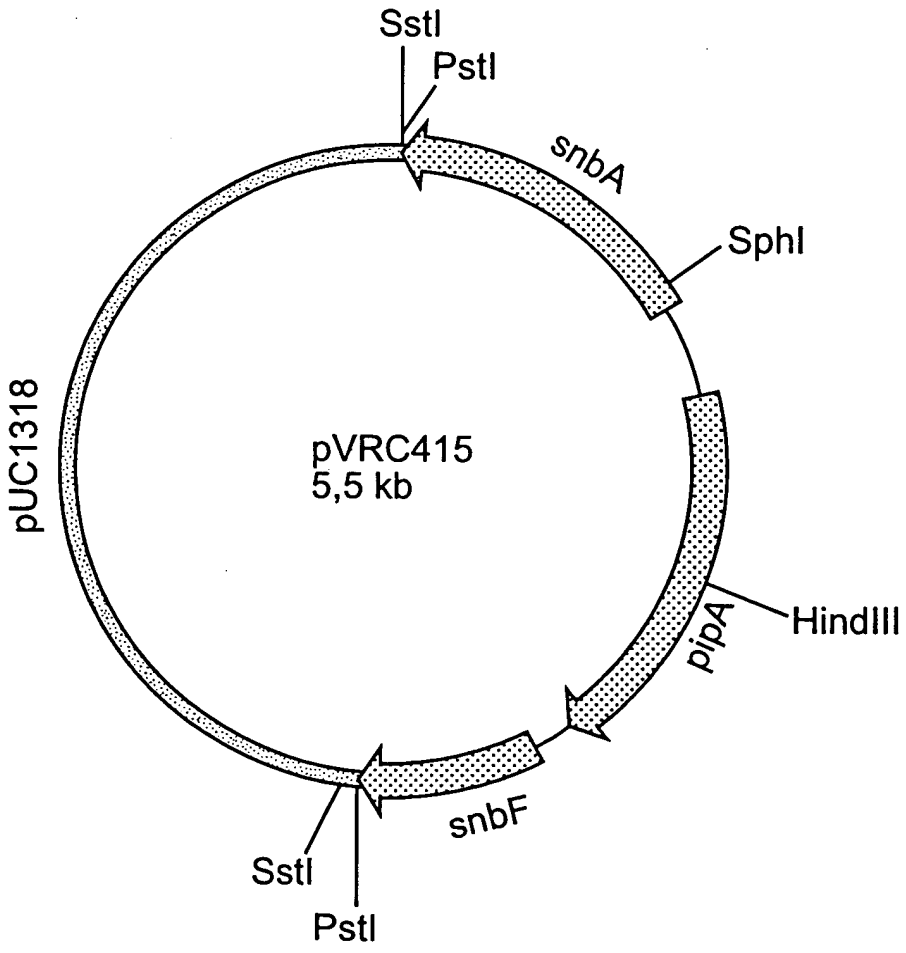

SstI
PstI
snbA
SphI
pUC1318
pVRC415
5,5 kb
pipA
HindIII
snbF
SstI
PstI

FIG. 8

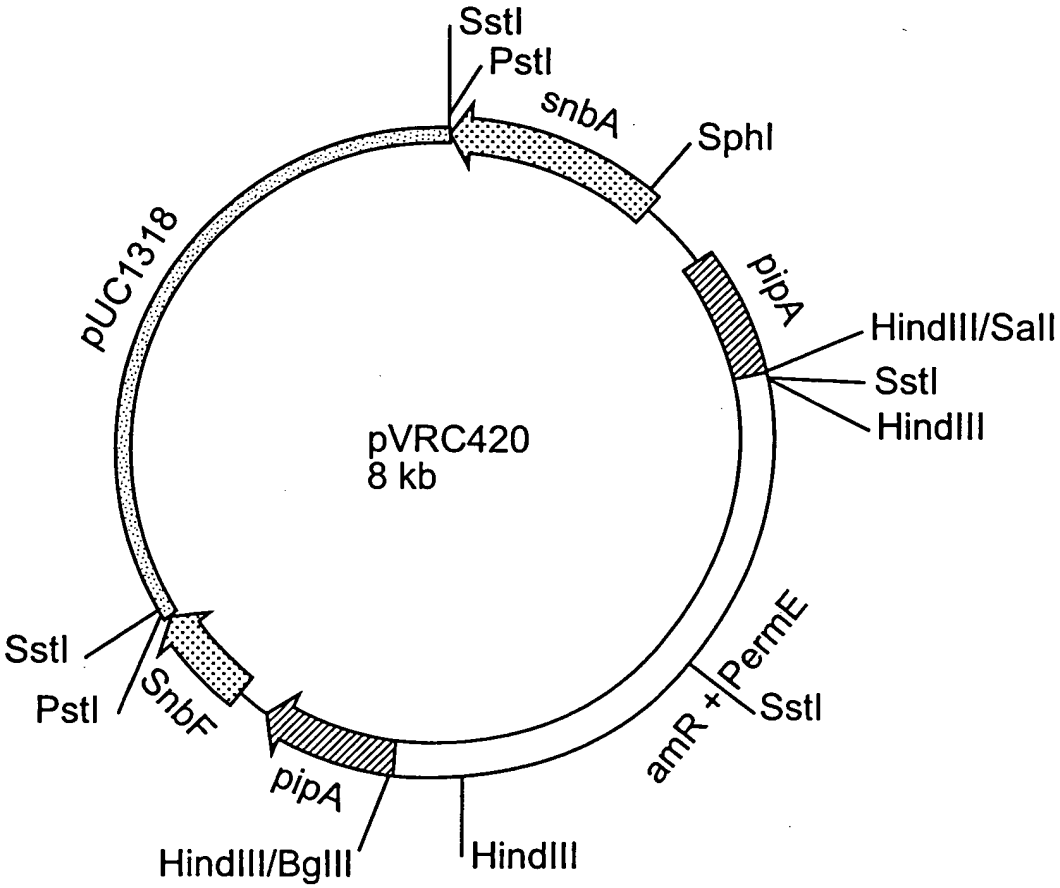


FIG. 9

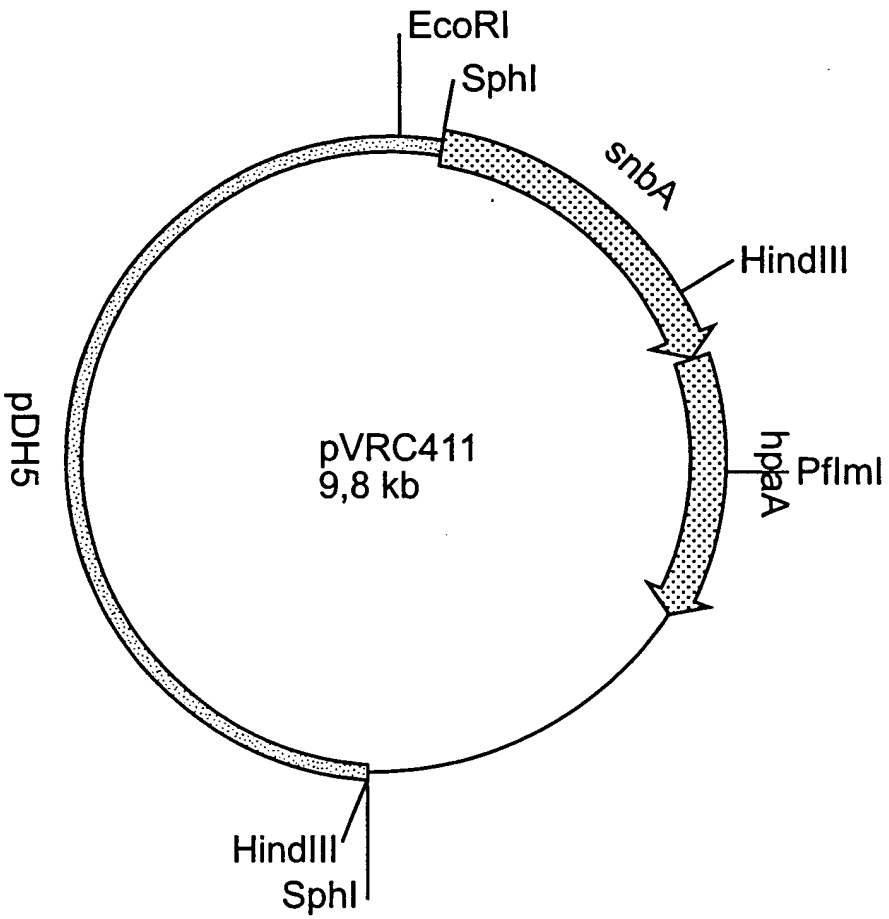

EcoRI
SphI
snbA
HindIII
hpaA
PflmI
pVRC411
9,8 kb
pDH5
HindIII
SphI

FIG. 10

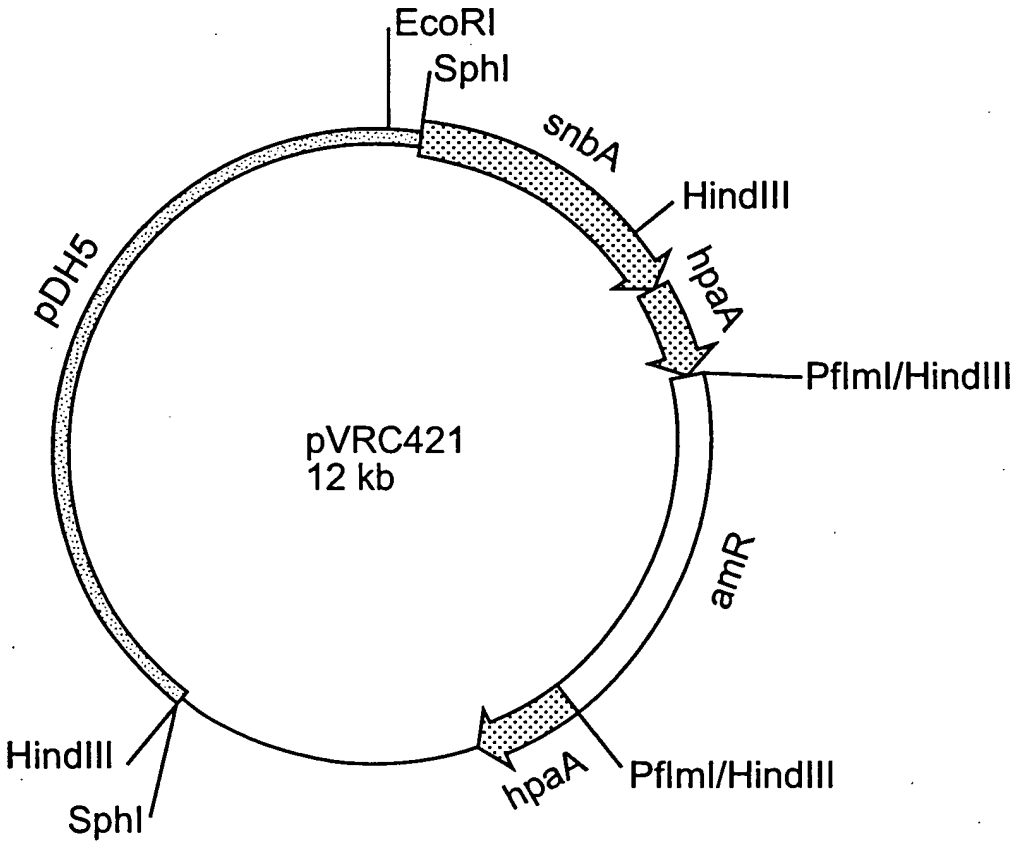

EcoRI
SphI
snbA
HindIII
hpaA
PflmI/HindIII
pVRC421
12 kb
amR
hpaA
PflmI/HindIII
HindIII
SphI
pDH5

FIG. 11

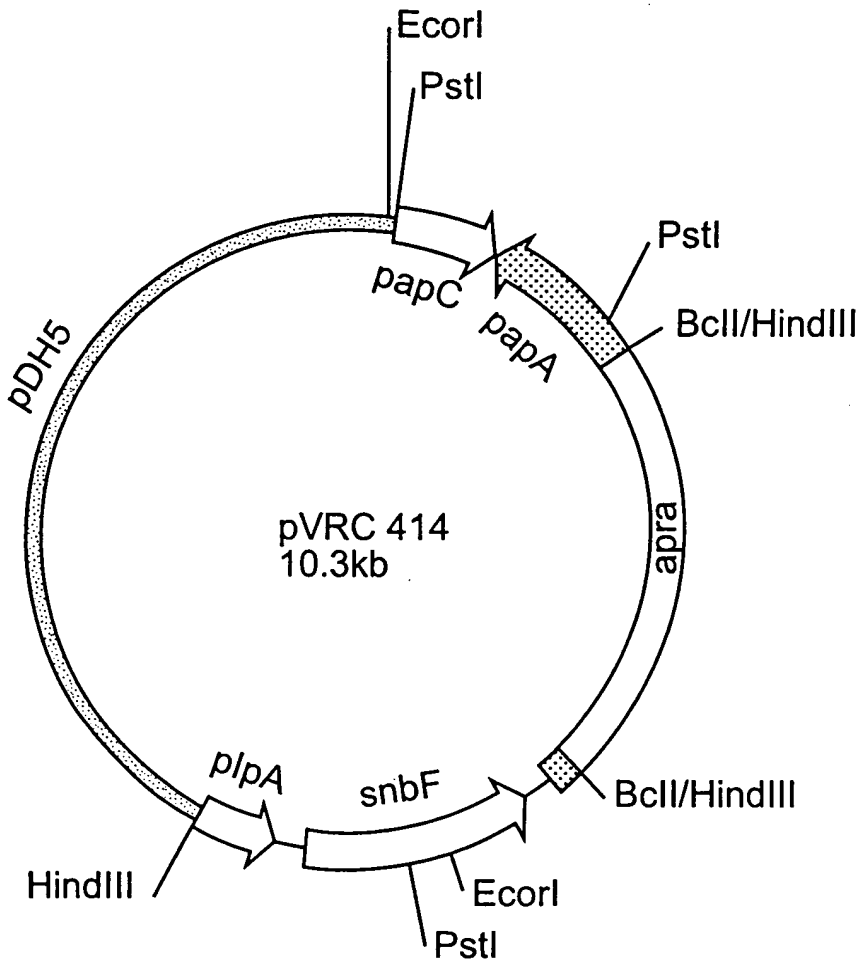
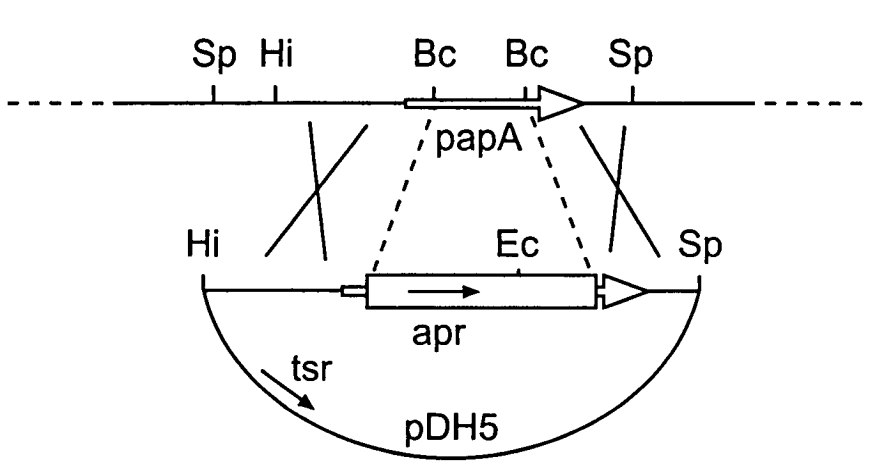

EcorI
PstI
PstI
BclI/HindIII
papC
papA
pDH5
pVRC 414
10.3kb
apra
plpA
snbF
BclI/HindIII
HindIII
EcorI
PstI

FIG. 12



CHROMOSOME OF
S. pristinaespiralis

pVRC414

SUICIDE VECTOR

apr: RESISTANCE TO APRAMYCINE
tsr: RESISTANCE TO THIOSTREPTON

S. pristinaespiralis

R S

Apra Thio

CHROMOSOME OF
S. pristinaespiralis sp212

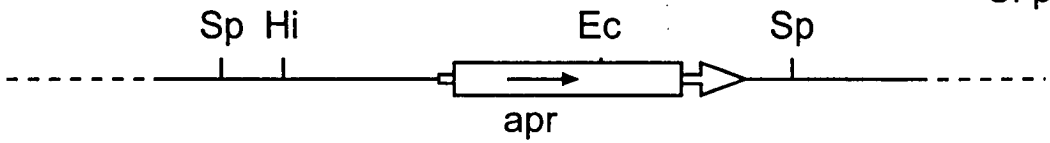


FIG. 13